

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method for supporting the quality of service in packet data transmission in a radio network, whereby transmission over the air interface is in radio flows, the method comprising:  
selecting a radio flow having appropriate quality of service characteristics for the packet to be transmitted over the air interface from a selection of predefined default radio flows having different quality of service characteristics.
2. (previously presented) A method as claimed in claim 1, wherein selecting the radio flow comprising providing the packet to be transmitted with a radio flow identifier selected from predefined default radio flow identifiers representative of different quality of service characteristics.
3. (previously presented) A method as claimed in claim 2, further comprising mapping the packet into the identified default radio flow for transmission over the air interface.
4. (previously presented) A method as claimed in claim 1, comprising:  
detecting handover of a mobile communications device having an active connection from one radio subnetwork to another;

performing default radio flow selection for the active connection in response to handover detection.

5. (previously presented) A method as claimed in claim 1, comprising:  
monitoring packets to be transmitted over the air interface to detect IP flows;

switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.

6. (previously presented) A method as claimed in claim 5, wherein switching the detecting IP flow to a dedicated radio flow comprises:

providing the packets of a detected IP flow with an identifier of the dedicated radio flow; and

mapping the packets of the detected IP flow into the identified dedicated radio flow for transmission over the air interface.

7. (previously presented) A radio access system for supporting the quality of service in data packet transmission over the air interface, the system comprising:

a selection of predefined default radio flows having different quality of service characteristics; and

means for selecting a radio flow having appropriate quality of service characteristics for the packet to be transmitted over the air interface from the selection.

8. (previously presented) A system as claimed in claim 7, wherein the radio flow selecting means comprises:

means for providing the packet to be transmitted with a radio flow Identifier selected from identifiers corresponding to the predefined default radio flows.

9. (previously presented) A system as claimed in claim 8, further comprising means for mapping the packet into the identified default radio flow for transmission over the air interface.

10. (previously presented) A system as claimed in claim 7, further comprising means for detecting handover of a mobile communications device having an active connection from one radio subnetwork to another; and wherein the selection means selects a default radio flow for the active connection in response to handover detection.

11. (previously presented) A system as claimed in claim 7, further comprising:

means for monitoring packets to be transmitted over the air interface to detect IP flows;

means for switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.

12. (previously presented) A system as claimed in claim 11, wherein the switching means comprises:

means for providing the packets of a detected IP flow with an identifier of the dedicated radio flow; and

means for mapping the packets of the detected IP flow into the identified dedicated radio flow for transmission over the air interface.

13. (previously presented) A communication device for use in a system which supports the quality of service in data packet transmission over the air interface and comprises a selection of predefined default radio flows having different quality of service characteristics, wherein the device is arranged to select a default radio flow having appropriate quality of service characteristics for the packet to be transmitted over the air interface from the selection.

14. (previously presented) A device as claimed in claim 13, which is a mobile communication device or a mobile router.

15. (canceled)

16. (previously presented) A method for supporting the quality of service in packet data transmission in a radio network, whereby transmission over the air interface is based on packet scheduling, the method comprising:

selecting a radio scheduling queue having appropriate quality of service characteristics for the packet to be transmitted over the air interface from a selection of default radio scheduling queues having different quality of service characteristics.

17. (previously presented) A method as claimed in claim 16, wherein the radio scheduling queues may be either aggregated in the air interface or identified separately in the air interface with the air of queue or connection specific radio flow identifiers.

18. (previously presented) A radio access system for supporting the quality of service in data packet transmission over the air interface, the system comprising:

a selection of default radio scheduling queues having different quality of service characteristics; and

means for selecting a radio scheduling queue having appropriate quality of service characteristics for the packet to be transmitted over the air interface from the selection.

19. (previously presented) A communication device for use in a system which supports the quality of service in data packet transmission over the air interface and comprises a selection of default radio scheduling queues having different quality of service characteristics, wherein the device is arranged to select a default radio scheduling queue having appropriate quality of service characteristics for the packet to be transmitted over the air interface from the selection.

20. (previously presented) A method as claimed in claim 2, comprising:

detecting handover of a mobile communications device having an active connection from one radio subnetwork to another;

performing default radio flow selection for the active connection in response to handover detection.

21. (previously presented) A method as claimed in claim 3, comprising:
- detecting handover of a mobile communications device having an active connection from one radio subnetwork to another;
  - performing default radio flow selection for the active connection in response to handover detection.
22. (previously presented) A method as claimed in claim 2, comprising:
- monitoring packets to be transmitted over the air interface to detect IP flows;
  - switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.
23. (previously presented) A method as claimed in claim 3, comprising:
- monitoring packets to be transmitted over the air interface to detect IP flows;
  - switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.
24. (previously presented) A system as claimed in claim 8, further comprising means for detecting handover of a mobile communications device having an active connection from one radio subnetwork to another; and wherein the selection means selects a default radio flow for the active connection in response to handover detection.

25. (previously presented) A system as claimed in claim 9, further comprising means for detecting handover of a mobile communications device having an active connection from one radio subnetwork to another; and wherein the selection means selects a default radio flow for the active connection in response to handover detection.

26. (previously presented) A system as claimed in claim 8, further comprising:  
means for monitoring packets to be transmitted over the air interface to detect IP flows;  
means for switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.

27. (previously presented) A system as claimed in claim 9, further comprising:  
means for monitoring packets to be transmitted over the air interface to detect IP flows;  
means for switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.

28. (previously presented) A system as claimed in claim 10, further comprising:  
means for monitoring packets to be transmitted over the air interface to detect IP flows;  
means for switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.

29. (currently amended) A device as claimed in claim 13, ~~used in a system as claimed in claim 8~~ wherein the system further comprises means for providing the packet to be transmitted with a radio flow identifier selected from identifiers corresponding to the predefined default radio flows.

30. (currently amended) A device as claimed in claim ~~13~~ 29, ~~used in a system as claimed in claim 9~~ wherein the system further comprises means for mapping the packet into the identified default radio flow for transmission over the air interface.

31. (previously presented) A device as claimed in claim 13, ~~used in a system as claimed in claim 10~~ wherein the system further comprises means for detecting handover of a mobile communications device having an active connection from one radio subnetwork to another; and wherein the device selects a default radio flow for the active connection in response to handover detection.

32. (currently amended) A device as claimed in claim 13, ~~used in a system as claimed in claim 11~~ wherein the system further comprises means for monitoring packets to be transmitted over the air interface to detect IP flows; and means for switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.

33. (previously presented) A device as claimed in claim ~~13~~ 32, ~~used in a system as claimed in claim 12~~ wherein the device comprises means for providing the packets of a detected IP flow with an identifier of the dedicated radio flow; and



means for mapping the packets of the detected IP flow into the identified dedicated radio flow for transmission over the air interface.

34. (canceled)

35. (previously presented) A device as claimed in claim 14, used in a system as claimed in claim 8 wherein the system further comprises means for providing the packet to be transmitted with a radio flow identifier selected from identifiers corresponding to the predefined default radio flows.

36. (previously presented) A device as claimed in claim 14, used in a system as claimed in claim 9 wherein the system further comprises means for mapping the packet into the identified default radio flow for transmission over the air interface.

37. (previously presented) A device as claimed in claim 14, used in a system as claimed in claim 10 wherein the system further comprises means for detecting handover of a mobile communications device having an active connection from one radio subnetwork to another; and wherein the device selects a default radio flow for the active connection in response to handover detection.

38. (previously presented) A device as claimed in claim 14, used in a system as claimed in claim 11 wherein the system further comprises means for monitoring packets to be transmitted over the air interface to detect IP flows; and

means for switching a detected IP flow to a dedicated radio flow having corresponding quality of service characteristics.

39. (previously presented) A device as claimed in claim-14 38, used in a system as claimed in claim-12 wherein the device comprises means for providing the packets of a detected IP flow with an Identifier of the dedicated radio flow; and  
means for mapping the packets of the detected IP flow into the identified dedicated radio flow for transmission over the air interface.

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